What is claimed:

1. A composition for delivery of a gene to a syncytial structure comprising stem cells incorporated with the gene.

2. The stem cells of claim 1, wherein the stem cells are mesenchymal stem cells.

3. The composition of claim 1, wherein the gene encodes MiRP1.

4. The composition of claim 1, wherein the gene encodes a HCN channel.

5. The HCN channel of claim 4, wherein the HCN channel is HCN1.

6. The HCN channel of claim 4, wherein the HCN channel is HCN2.

7. The HCN channel of claim 4, wherein the HCN channel is HCN4.

8. The composition of claim 1 wherein the gene encodes a mutated HCN channel.

9. The mutated HCN channel of claim 8, wherein the mutated HCN channel is E324A-HCN2.

10. The mutated HCN channel of claim 8, wherein the mutated HCN channel is Y331A-HCN2.

11. The mutated HCN channel of claim 8, wherein the mutated HCN channel is Y331A,E324A-HCN2.

12. The composition of claim 1, wherein the gene encodes MiRP1 and a HCN channel.

13. The HCN channel of claim 12, wherein the HCN channel is HCN1.

14. The HCN channel of claim 12, wherein the HCN channel is HCN2.

15. The HCN channel of claim 12, wherein the HCN channel is HCN4.

16. The composition of claim 1, wherein the gene encodes MiRP1 and a mutated HCN channel.

17. The mutated HCN channel of claim 16, wherein the mutated HCN channel is E324A-HCN2.

18. The mutated HCN channel of claim 16, wherein the mutated HCN channel is Y331A-HCN2.

19. The mutated HCN channel of claim 16, wherein the mutated HCN channel is Y331A,E324A-HCN2.

20. A composition for ion channel transfer which comprises stem cells incorporated with a compound in an amount sufficient to create ion channels.

21. The stem cells of claim 20, wherein the stem cells are mesenchymal stem cells.

22. The compound of claim 20, wherein the compound comprises a nucleic acid which encodes MiRP1.

23. The compound of claim 20, wherein the compound comprises a nucleic acid which encodes a HCN channel.

24. The HCN channel of claim 23, wherein the HCN channel is HCN1.

25. The HCN channel of claim 23, wherein the HCN channel is HCN2.

26. The HCN channel of claim 23, wherein the HCN channel is HCN4.

27. The compound of claim 20, wherein the compound comprises a nucleic acid which encodes a mutated HCN channel.

28. The mutated HCN channel of claim 27, wherein the mutated HCN channel is E324A-HCN2.

29. The mutated HCN channel of claim 27, wherein the mutated HCN channel is Y331A-HCN2.

30. The mutated HCN channel of claim 27, wherein the mutated HCN channel is Y331A,E324A-HCN2.

31. The compound of claim 20, wherein the compound comprises nucleic acids which encode MiRP1 and a HCN channel.

32. The HCN channel of claim 31, wherein the HCN channel is HCN1.

33. The HCN channel of claim 31, wherein the HCN channel is HCN2.

34. The HCN channel of claim 31, wherein the HCN channel is HCN4.

35. The compound of claim 20, wherein the compound comprises nucleic acids which encodes MiRP1 and a mutated HCN channel.

36. The mutated HCN channel of claim 35, wherein the mutated HCN channel is E324A-HCN2.

37. The mutated HCN channel of claim 35, wherein the mutated HCN channel is Y331A-HCN2.

38. The mutated HCN channel of claim 35, wherein the mutated HCN channel is Y331A,E324A-HCN2.

39. A method of expressing a functional gene product in a syncytial structure comprising administering the composition of claim 1 to the syncytial structure.

40. The gene product of claim 39, wherein the gene product is an ion channel.

41. The syncytial structure of claim 39, wherein the syncytial structure is a mammalian heart.

42. The syncytial structure of claim 39, wherein the syncytial structure is a mammalian bladder.

43. The syncytial structure of claim 39, wherein the syncytial structure is an artery.

44. The syncytial structure of claim 39, wherein the syncytial structure is an arteriole.

45. The syncytial structure of claim 39, wherein the syncytial structure is a mammalian liver.

46. The syncytial structure of claim 39, wherein the syncytial structure is a mammalian gastrointestinal tract.

47. The syncytial structure of claim 39, wherein the syncytial structure is a tumor originating from epithelial tissue.

48. The syncytial structure of claim 39, wherein the syncytial structure is a tumor originating from smooth muscle tissue.

49. A method of expressing a functional ion channel in a syncytial structure comprising administering

the composition of claim 20 to the syncytial structure.

50. The syncytial structure of claim 49, wherein the syncytial structure is a mammalian heart.

51. A method of treating a cardiac condition in a subject which comprises contacting a cell of the heart of the subject with the composition of claim 20 in an amount sufficient to increase the current expression of the cell, thereby treating the cardiac condition in the subject.

52. The method of claim 51, wherein the current is a pacemaker current.

53. The method of claim 51, wherein the cardiac condition is a cardiac rhythm disorder.

54. The method of claim 51, wherein the cardiac rhythm disorder is selected from a group consisting of at least one of conduction block, complete atrioventricular block, incomplete atrioventricular block and sinus node dysfunction.

55. The method of claim 51, wherein the step of contacting is selected from the group consisting of systemic administration to the structure and injection.

56. The method of claim 55, wherein the administration of the contacting is selected from the group comprising topical application to the cells of the structure, microinjection and catheterization.

57. A method of inducing a current in the heart in a subject which comprises contacting a cell of the heart of a subject with the composition of claim 20 in a sufficient amount to induce a current in the cell of the heart of a subject, thereby inducing a current in the cell of the heart of the subject.

58. A method of increasing the heart rate in a subject which comprises contacting a cell of the heart of a subject with the composition of claim 20 in an amount sufficient to decrease the time constant of activation of the cell of the heart, thereby increasing heart rate in the subject.

59. A method of inducing a current in a cell which comprises contacting a cell with the composition of claim 20 in a sufficient amount to induce a current in the cell, thereby inducing a current in the cell.

60. A method of causing a contraction of a cell which comprises contacting the cell with the composition of claim 20 in an amount sufficient to induce a current required to cause a

contraction of the cell, thereby causing a contraction of the cell.

61. A method of shortening the time required to activate a cell which comprises contacting a cell with the composition of claim 20 in a sufficient amount to decrease the time constant of activation of the cell, thereby shortening the time required to activate the cell.

62. A method of changing the membrane potential of a cell which comprises contacting a cell with the composition of claim 20 in a sufficient amount to change the membrane potential of the cell, thereby changing the membrane potential of the cell.

63. A cardiac myocyte developed from mesenchymal stem cells transformed with a gene.

64. A composition for delivery of small molecules that comprises stem cells incorporated with the small molecules or genes encoding the small molecules.